

1. (Currently Amended) A method of treating an ~~established~~ distressed tree exhibiting a decline in health characterized by a ratio reduction between root structure to canopy volume such that the root structure is insufficient to support the canopy volume, the tree having an established root system in the earth, said method ~~a root system of the distressed tree planted in soil~~ comprising the steps of:

creating, in a container, a mixture comprising a fertilizer and a growth hormone; and

applying the previously created mixture from the container directly underground to a root area of the soil in the root system of the tree to treat the root system of the distressed tree.

2. (Currently Amended) The method of Claim 1, wherein the growth hormone is selected from the group consisting of naphthalene acetic acid and 3-indolebutyric acid.

3. (Currently Amended) The method of ~~Claim 1~~ Claim 2, wherein the ~~distressed tree is a Post Oak~~ the step of applying the mixture comprises the step of applying the mixture directly underground through holes drilled at points around the periphery of the tree canopy.

4. (Currently Amended) The method of ~~Claim 1~~ Claim 3, wherein the ~~mixture comprises a mixture of powders~~ the step of applying the mixture comprises the step of applying the mixture directly underground through holes drilled at points around the periphery of the tree canopy spaced apart by substantially 18 inches.

5. (Currently Amended) The method of ~~Claim 1~~ Claim 4, wherein the ~~mixture comprises at least one liquid~~ further comprising the steps of:
watering the tree to saturate the soil to a depth of 8 to 10 inches,

allowing the soil in the root system of the tree to dry out over time so as to prevent bacteria and fungi from attacking the root, and
re-watering the tree to saturate the soil to a depth of 8 to 10 inches.

6. (Currently Amended) The method of ~~Claim 1~~ Claim 5, wherein the fertilizer has a nitrogen content in the range of about 10 to about 25 percent by weight, a phosphorous content in the range of about 5 to about 20 percent by weight, and a potassium content in the range of about 5 to about 20 percent by weight.

7. (Currently Amended) The method of ~~Claim 1~~ Claim 6, wherein the ~~fertilizer comprises a liquid~~ further comprising the step of:

leaving intact the holes drilled at points around the periphery of the tree canopy so as to aerate the root system of the tree and aid in root growth.

8. (Currently Amended) The method of ~~Claim 1~~ Claim 7, wherein said step of creating a mixture further comprises the step of adding a fungicide.

9. (Currently Amended) The method of Claim 8, wherein said fungicide comprises the tetramethylthiuramdisulfide.

10. (Currently Amended) A mixture for treating roots of an adult distressed tree exhibiting a decline in health characterized by a ratio reduction between root structure to canopy volume such that the root structure is insufficient to support the canopy volume, the tree having an established root system in the earth ~~said roots planted within soil,~~ said mixture comprising:

a fertilizer; and

a root growth hormone selected from the group consisting of naphthalene acetic acid, 3-indolebutyric acid, and wherein said fertilizer and said growth hormone are selected to be effective to treat said roots of said distressed tree within said soil.

11. (Original) The mixture of Claim 10 wherein said root growth hormone comprises about 0.1% by weight of a powder.

12. (Original) The mixture of Claim 10 wherein said root growth hormone comprises about 0.1% by weight of a liquid.

13. (Original) The mixture of Claim 10 wherein a proportion of said root growth hormone is selected to provide an effective dosage of about .355 milligrams per application site.

14. (Original) The mixture of Claim 10 wherein said fertilizer comprises a powder having a nitrogen content in the range of about 10 to about 25 percent by weight, a phosphorous content in the range of about 5 to about 20 percent by weight, and a potassium content in the range of about 5 to about 20 percent by weight.

15. (Original) The mixture of Claim 10 wherein said fertilizer comprises a liquid.

16. (Original) The mixture of Claim 10 and further comprising a fungicide.

17. (Currently Amended) The ~~methods~~ mixture of Claim 16 wherein said fungicide comprises tetramethylthiuramdisulfide.

18. (Currently Amended) A method for treating a distressed tree planted in the earth, the distressed tree exhibiting a decline in health characterized by a ratio reduction between root structure to canopy volume such that the root structure is insufficient to support the canopy volume, the tree having an established root system in the earth, said method comprising the steps of:

creating a hole in the soil in a root area of a tree; and

applying directly underground a previously prepared mixture comprising a fertilizer and a root growth hormone in the hole created in the a subterranean root area of the tree.

19. (Currently Amended) The method of Claim 18, and wherein
~~further comprising the step of forming the mixture comprising the~~
~~substep: selecting~~ the root growth hormone is selected from the group
consisting of naphthalene acetic acid ~~acid~~, and 3-indolebutyric acid.

20. (Currently Amended) The method of ~~Claim 18~~ Claim 19, wherein
said step of creating a hole comprises the step of creating the hole
with water jet.

21. (Currently Amended) The method of Claim 18 and further
comprising the steps of:

~~cyclically following said step or applying saturating the tree~~
~~root area with water and drying the root area~~

watering the distressed tree to saturate the soil to a depth of 8
to 10 inches,

allowing the soil in the root system of the distressed tree to dry
out over time so as to prevent bacteria and fungi from attacking the
root, and

rewatering the distressed tree to saturate the soil to a depth of
8 to 10 inches.

22. (Currently Amended) A kit for treating an established distressed tree exhibiting a decline in health characterized by a ratio reduction between root structure to canopy volume such that the root structure is insufficient to support the canopy volume, the tree having an established root system in the earth ~~having a root system disposed within soil~~ , said kit comprising:

a previously prepared mixture comprising a fertilizer and a growth hormone;

a container for holding the previously prepared mixture; and

a tool for applying the mixture directly underground to the root system within the soil.

23. (Original) The kit of Claim 22 wherein the growth hormone is selected from the group consisting of naphthalene acetic acid, 3-indolebutyric acid, and derivatives thereof.

24. (Original) The kit of Claim 22 and further comprising instructions for applying the mixture to the distressed tree.

25. (Original) The kit of Claim 22 and further comprising an implement for applying the mixture to the distressed tree.

26. (Currently Amended) A The method of treating a tree in decline characterized by a ratio reduction between root structure to canopy volume such that the root structure is insufficient to support the canopy volume, the tree having an established root system in the earth, a root system of the tree in decline existing in soil said method comprising the steps of:

creating a mixture comprising a fertilizer and a growth hormone;
and

applying the mixture directly underground to the root area and the soil within the root area in order to treat the root system of the tree in decline.

27. (Currently Amended) A The method of treating a tree exhibiting a reduction in the number of root hairs characterized by a ratio reduction between root structure to canopy volume such that the root structure is insufficient to support the canopy volume, the tree having an established root system in the earth, a root system of the tree exhibiting a reduction in the number of root hairs existing in soil said method comprising the steps of:

creating a mixture comprising a fertilizer and a growth hormone;
and

applying the mixture directly underground to the root area and the soil within the root area in order to treat the root system of the tree exhibiting a reduction in the number of root hairs.

28. (Currently Amended) A The method of treating a tree exhibiting a thinning of the canopy due to physical root damage caused by arboreal encroachment, a root system of the tree exhibiting a thinning of the canopy and existing in soil, said method comprising the steps of:

creating a mixture comprising a fertilizer and a growth hormone;
and

applying the mixture directly underground to the root area and the soil within the root area in order to treat the root system of the tree exhibiting a thinning of the canopy.

29. (Currently Amended) A The method of treating a tree exhibiting water sprouts on large limbs characterized by a ratio reduction between root structure to canopy volume such that the root structure is insufficient to support the canopy volume, the tree having an established root system in the earth, a root system of the tree

~~exhibiting water sprouts on large limbs existing in soil~~ said method comprising the steps of:

creating a mixture comprising a fertilizer and a growth hormone;
and

applying the mixture directly underground to the root area and the soil within the root area in order to treat the root system of the tree exhibiting water sprouts on large limbs.

30. (Currently Amended) A The method of treating a tree exhibiting cessation of leaf production characterized by a ratio reduction between root structure to canopy volume such that the root structure is insufficient to support the canopy volume, the tree having an established root system in the earth, ~~a root system of the tree exhibiting cessation of leaf production existing in soil~~ said method comprising the steps of:

creating a mixture comprising a fertilizer and a growth hormone;
and

applying the mixture directly underground to the root area and the soil within the root area in order to treat the root system of the tree exhibiting cessation of leaf production.

31. (Currently Amended) A The method of treating a tree dying from physical root damage to the tree characterized by a ratio reduction between root structure to canopy volume such that the root structure is insufficient to support the canopy volume, the tree having an established root system in the earth, a root system of the dying tree existing in soil said method comprising the steps of:

creating a mixture comprising a fertilizer and a growth hormone;
and

applying the mixture directly underground to the root area and the soil within the root area in order to treat the root system of the dying tree.

32. (Currently Amended) A The method of treating a tree exhibiting general injury to its health characterized by a ratio reduction between root structure to canopy volume such that the root structure is insufficient to support the canopy volume, the tree having an established root system in the earth, a root system of the tree exhibiting general injury to its health existing in soil said method comprising the steps of:

creating a mixture comprising a fertilizer and a growth hormone;
and

applying the mixture directly underground to the root area and the soil within the root area in order to treat the root system of the tree exhibiting general injury to its health.

33. (Currently Amended) A The method of treating a tree exhibiting low growth characterized by a ratio reduction between root structure to canopy volume such that the root structure is insufficient to support the canopy volume, the tree having an established root system in the earth, a root system of the tree exhibiting low growth existing in soil said method comprising the steps of:

creating a mixture comprising a fertilizer and a growth hormone;
and

applying the mixture directly underground to the root area and the soil within the root area in order to treat the root system of the tree exhibiting low growth.

34. (Currently Amended) The method of ~~Claims 1-9 and Claims 26-33~~ 33 wherein the tree is an Oak, Elm, Hickory, Pecan, Bois d'ark, Hackberry, or other hardwood.